

Work Description Document

Repair for

**Processor, Signal Data (Signal Trans) NSN- 5895-01-200-6498IB,
P/N- 83-02008-001**

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1.0 SCOPE AND PURPOSE

1.1 Scope

For the following end item(s), the contractor shall furnish all facilities, parts, materials, data, equipment and services that are required to disassemble, inspect, repair as necessary, upgrade to modern parts, reassemble clean and package. The contractor shall perform this work in accordance with the documentation associated with this item. This WDD establishes the minimum work requirements to return the end items(s) to a serviceable and functionally, like new condition.

1.2 Purpose

The purpose of this work description document is to guide the contractor in the repair of the said items in the areas of work performance, test requirements, documentation, special requirements, quality control, packaging and shipping, condemnation issues and safety issues.

1.3 Background

The listed Items below will be shipped to the contractor for repair.

ITEM DESCRIPTION	NSN	P/N	QTY
Processor, Signal Data	5895-01-200-6498IB	83-02008-001	26

2.0 **REFERENCE DRAWINGS**

The following documents are considered as reference manuals for the purpose of interpreting the requirements of this WDD, but are not contractual requirements.

Note: The contractor should request and attempt to obtain all required and available documentation prior to proposal submittal and contract award.

<u>Reference</u>	<u>Title</u>
MIL-STD-129N	Standard Practice for Military Marking
MIL-HDBK-263	Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
MIL-HDBK-454A	Standard General Requirements for Electronic Equipment
MIL-HDBK-470	Maintainability Program Requirements
DOD-STD-973	Configuration Management (Obsolete)
MIL-STD-130K	Identification Marking of U.S. Military Property
MIL-STD-461E	Electronic Interference Characteristics, Requirements for Equipment
MIL-STD-882D	System Safety Program Requirements
MIL-STD-1686C	Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices)
IPC	Electronic Repair standards
IEEE	Electronic standards
ANSI	Engineering standards
ISO	Manufacturing standards
83-02008	Electrospace Inc. cover drawing number
TO31P2-2MSQ118-131	Technical Orders page 8-1, whole book

3.0 **WORK PERFORMANCE**

- 3.1 The contractor shall clean to the degree necessary to adequately perform a visual inspection of all components. An inspection shall be performed to identify physically damaged and/or non-functional electrical components that do not comply with IPC Class 2 standards. All damaged and/or non-

- functional components (that do not comply with IPC Class 2 standards) shall be replaced.
- 3.2 All discrete components shall be demonstrated to function electrically when using calibrated test and measuring equipment. Calibration of measuring equipment shall meet ANSI standards.
 - 3.3 Components (that are used to replace defective components) shall be equal to original design. If original design components are not available, components with equal electrical tolerance and functionality shall be used. Where quality and performance characteristics are unknown, the procurement office will be consulted for guidance.
 - 3.4 The use of any soldering techniques shall be designed to minimize damage to the circuit card.
 - 3.5 Repaired burned, lifted, cracked and/or non-functional conductor traces and solder pads shall meet IPC standards.
 - 3.6 The repair process shall be electro-magnetically compatible with the repaired part, the other equipment in the next higher assembly and with the environment. Adequate shielding and circuit separation shall be part of the repair. The repaired portion of the system shall comply with the conducted and radiated interference suppression requirements.
 - 3.7 Nameplates and product marking shall be correct and accurate upon repair completion. The assemblies, subassemblies, and part that constitute this repair shall be marked for identification in accordance with existing style and format.
 - 3.8 Interchangeability: Hardware items having equivalent functional, physical and performance characteristics shall be interchangeable. Design criteria shall incorporate features to prevent incorrect installation of items. New part shall be presented to the government engineer and equipment specialist for incorporation into the baseline data package (Drawing, Technical Orders)

4.0 **TEST REQUIREMENTS**

- 4.1 The contractor shall visually inspect for solder joint quality and visually inspect for board cleanliness in accordance with IPC class 3 standards.
- 4.2 The contractor shall electrically test all reworked or repaired components to demonstrate successful completion of work by using equipment specified test procedures and results delineated by the manufacturer, if any, or by good electronic practices.
- 4.3 The contractor shall functionally test the overall circuit board for proper performance using test data, where appropriate, using manufacturer supplied specifications, if any, or by using good electronic practices. Where performance specifications are unknown, the procurement office shall be consulted and, if needed, guidance given.
- 4.4 All inspections/tests and repairs will be documented and reported to the OO-ALC/LHJE.

Recommended Reference CDRL numbers DI-QCIC-80553/T, DI-NDTI-80809B, DI-NDTI-80603.

5.0 SPECIAL REQUIREMENTS

None

6.0 QUALITY CONTROL

- 6.1 The contractor shall develop, implement and maintain a quality assurance program for all materials, supplies and services at contractor, subcontractor, vendor and operational sites. Quality shall be ensured throughout the program in all areas of fabrication, assembly inspection testing, shipping and on-site installation.

7.0 PACKAGING, HANDLING, SECURITY AND TRANSPORTATION**7.1 RECEIVING INSPECTION**

- 7.1.1 The contractor shall notify the Administrative Contracting Officer (ACO) or Quality Assurance Representative (QAR) of all damages and shortages or discrepancies discovered on receipt of any item(s).

7.2 SECURITY

- 7.2.1 No security provisions are required.

7.3 MARKING

- 7.3.1 Item(s) shall be marked with contract number and date of repair only.

7.4 HANDLING

- 7.4.1 This item has been identified as electrostatic discharge sensitive and will be handled in accordance with IPC standards for electrostatic sensitive devices.

8.0 CONDEMNATION

- 8.1 The contractor shall not condemn item(s) without prior approval by the Procurement Contracting Officer (PCO) through the ACO. The contractor will make disposition of the condemned item in the manner directed by the ACO.

9.0 SAFETY

- 9.1 The contractor shall comply with all safety provisions, e.g., technical specifications, technical publications, Federal Occupational Safety and Health Standards (Title 29 CFR. Part 1910). If there is no applicable Occupational Safety and Health Administration (OSHA) standard, use Air Force Occupational Safety and Health Standard (AFOSH) or applicable nationally recognized sources of safety, health, and fire prevention standards referenced in the work requirements of this contract.
- 9.2 Contractor shall comply with all applicable Federal, State and local legal requirements regarding workers health and safety. Contractor is solely responsible for determining the legal requirements that apply to his activities.

- 9.3 The contractor shall protect government property to prevent damage during the period of time the property is in the possession of the contractor. The contractor shall report promptly to the Administrative Contracting Officer (ACO) all available facts relating to each instance of damage to government property.
- 9.4 When a major mishap (\$10,000 or more) involving government property occurs, the contractor shall immediately secure the accident scene and the damaged item until released by the accident investigative authority as designated by the contracting Air Logistics Center (ALC) Safety Office. Such release shall be accomplished by the ACO.
- 9.5 If the government elects to conduct an investigation of the accident, the contractor shall cooperate fully and assist government personnel until the investigation is completed.
- 9.6 The contractor shall include a clause in each of its subcontracts requiring subcontractor cooperation and assistance in accident reporting and investigation.